

1       WE CLAIM:

2           1.       A method for facilitating performance by a participant in an event that  
3       includes movement along a course, the method comprising:  
4                 monitoring a first performance by a first participant in a first event;  
5                 accessing a geographic database that includes data that represents features in a  
6       first geographic area;  
7                 using the geographic database to match the first performance to a first course  
8       located in the first geographic area;  
9                 comparing the first performance of the first participant to a second performance;  
10      and  
11                 providing an indication of the comparing to the first participant.

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13           2.       The method of Claim 1 wherein the event is one selected from a group  
14       consisting of: running, bicycling, a road rally, a triathlon, a soap box derby, a dog sled  
15       race, cross-country skiing, sledding, a roller blade race, race walking, rowing, a  
16       steeplechase street luge, adventure racing, snow boarding, rock climbing, and extreme  
17       runs.

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19           3.       The method of Claim 1 wherein the first participant is stationary relative  
20       to the first course and the movement along the course is simulated.

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22           4.       The method of Claim 1 wherein the first participant physically moves  
23       along the first course.

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25           5.       The method of Claim 4 further comprising:  
26                 determining positions of the first participant during the first performance.

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28           6.       The method of Claim 5 wherein the positions of the first participant are  
29       determined using a first positioning device.

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2       7.     The method of Claim 6 wherein the first positioning device is selected  
3 from a group consisting of: a GPS unit, a DGPS unit, cell phone positioning technology  
4 that uses triangulation, cell phone positioning technology that uses time-of-arrival, cell  
5 phone positioning technology that uses direction-of arrival, and beacons.

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7       8.     The method of Claim 5 wherein the positions of the first participant are  
8 transmitted as data wirelessly from a first communications device located with the first  
9 participant.

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11       9.     The method of Claim 1 wherein the second performance is by a second  
12 participant.

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14       10.    The method of Claim 9 wherein the second performance is along a second  
15 course located in a second geographic area, which is different from the first geographic  
16 area.

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18       11.    The method of Claim 10 further comprising:  
19              determining positions of the second participant during the second performance.

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21       12.    The method of Claim 11 wherein the positions of the second participant  
22 are determined using a second positioning device.

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24       13.    The method of Claim 12 wherein the second positioning device is selected  
25 from a group consisting of: a GPS unit, a DGPS unit, cell phone positioning technology  
26 that uses triangulation, cell phone positioning technology that uses time-of-arrival, cell  
27 phone positioning technology that uses direction-of arrival, and beacons.

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1           14. The method of Claim 11 wherein the positions of the second participant  
2 are transmitted as data wirelessly from a second communications device located with the  
3 second participant.

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5           15. The method of Claim 9 wherein the second performance is along the first  
6 course, but occurred at a previous time.

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8           16. The method of Claim 1 wherein the second performance is by the first  
9 participant along the first course, but occurred at a previous time.

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11          17. The method of Claim 1 wherein the second performance is along a second  
12 course located in a second geographic area, which is different from the first geographic  
13 area, and further wherein the second performance is by the first participant, but occurred  
14 at a previous time.

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16          18. The method of Claim 1 wherein the indication is provided to the first  
17 participant during the event.

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19          19. The method of Claim 1 wherein the indication is provided to the first  
20 participant during the event via a wireless communications device.

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22          20. The method of Claim 1 wherein the first participant is stationary relative  
23 to the first course and the movement along the course is simulated by a machine  
24 connected directly to a program that compares the first performance the second  
25 performance and provides the indication to the first participant.

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27          21. A system comprising:

28              a monitoring means that monitors a first user's performance in an event that  
29 involves movement along a first course and provides an output indicative thereof;

1           a geographic database that includes data that represents features in a first  
2 geographic area that includes the first course; and  
3           a competition comparison and equivalency program that receives the output from  
4 the monitoring means and provides the first user with an indication that compares the first  
5 user's performance to a second performance.

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7           22.     The system of Claim 21 wherein the first user's performance is monitored  
8 by a stationary machine that simulates movement along the first course.

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10          23.     The system of Claim 21 wherein the first user's performance is monitored  
11 by a positioning unit that determines positions of the first user in the first geographic area  
12 while the first user is moving along the first course in the first geographic area.

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